

Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Herbert R. Campbell

GENERAL INFORMATION:

| | |
|----------------------------|--|
| Name: | LG&E - Magnolia Natural Gas Compressor Station |
| Address: | 650 LG&E Rd., Magnolia, KY |
| Date application received: | December 17, 2002 |
| SIC/Source description: | 4922/Natural Gas Transmission |
| AFS(10-digit) Plant ID: | 21-123-00012 |
| Application log number: | 55402 |
| Permit number: | V-03-033 |

APPLICATION TYPE/PERMIT ACTIVITY:

| | |
|--|---|
| <input type="checkbox"/> Initial issuance | <input type="checkbox"/> General permit |
| <input type="checkbox"/> Permit modification | <input type="checkbox"/> Conditional major |
| __Administrative | <input checked="" type="checkbox"/> Title V |
| __Minor | <input type="checkbox"/> Synthetic minor |
| __Significant | <input checked="" type="checkbox"/> Operating |
| <input checked="" type="checkbox"/> Permit renewal | <input type="checkbox"/> Construction/operating |

COMPLIANCE SUMMARY:

| | |
|---|---|
| <input type="checkbox"/> Source is out of compliance | <input type="checkbox"/> Compliance schedule included |
| <input checked="" type="checkbox"/> Compliance certification signed | |

APPLICABLE REQUIREMENTS LIST:

| | | |
|--|---|---|
| <input type="checkbox"/> NSR | <input type="checkbox"/> NSPS | <input checked="" type="checkbox"/> SIP |
| <input type="checkbox"/> PSD | <input type="checkbox"/> NESHAPS | <input type="checkbox"/> Other |
| <input type="checkbox"/> Netted out of PSD/NSR | <input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b) | |

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

| Pollutant | Actual (tpy) | Potential (tpy) |
|---------------------|--------------|-----------------|
| PM/PM ₁₀ | 2.5 | 5.46 |
| SO ₂ | 84.2 | 172.2 |
| NO _x | 137.7 | 385.46 |
| CO | 49.3 | 127.88 |
| VOC | 4.1 | 32.94 |

SOURCE PROCESS DESCRIPTION:

The Source is a natural gas (NG) compression and purification station. The station is operated as a baseload operation where NG is stored during the summer months in underground storage fields and withdrawn in the cold months. When the NG is withdrawn from the storage field it is:

- Purified (H₂S removed),
- Dehydrated (H₂O removed),
- Filtered and
- Compressed.

The station has six NG compressors which are NG-fired internal combustion engines. The NG processing at this site consists of two purification plants (35 and 50 MMScf/day units) and two dehydration plants (35 and 50 MMScf/day units).